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1. Title of the Invention

HOME SECURITY SYSTEM

2. Claims

1. A home security system comprising:

a monitoring terminal means including at least a security sensor among a monitoring sensor such as a heat sensor, a smoke sensor, the security sensor and an emergency button and a monitoring input means; and a centralized control board for receiving monitoring information sent from the monitoring terminal means and informing occurrence of abnormality with an optical means or alarm sound, wherein the centralized control panel is provided with a setting means for manually setting an insensitive time before starting a predetermined monitoring operation and an informing means for informing the insensitive time with an informing sound.

2. The home security system according to claim 1, wherein the setting means are individually provided for an out-of-home mode and an in-home mode and the modes each have a distinct informing sound.

3. The home security system according to claim 1, wherein the insensitive time set by the setting means is extended by receiving predetermined

information from the monitoring input means.

#### [Summary of the Invention]

The present invention intends to improve usability by separately and freely setting an insensitive time in setting an out-of-home mode and an insensitive time in coming home according to the place of a centralized control board and informing intrusion by sound during the insensitive time.

#### [Embodiment of the Invention]

Hereinafter, an embodiment of the present invention will be described.

Fig. 3 is a block diagram showing an embodiment of the present invention. In the figure, reference numeral 115 denotes a switch for setting an insensitive time after setting of an out-of-home mode and the insensitive time can be set in units of 10 seconds up to 80 seconds. Reference numeral 116 denotes a switch for setting an insensitive time at coming home and the insensitive time can be also set in units of 10 seconds up to 80 seconds. Configuration in this embodiment is different from the conventional configuration is that these two switches 115 and 116 are provided. Therefore, in Fig. 3, the same reference numerals are given to the same parts as those in the conventional configuration.

In a security system thus configured, when an out-of-home mode setting switch 1h of a centralized control board 1 is pressed, a microcomputer 102 operates a drive circuit 110 to turn on an out-of-home mode display unit 1k and oscillates an oscillation circuit 103 extremely briefly for a time set by an insensitive time set switch 115 to sound a built-in buzzer 1a, thereby informing the insensitive time. When the sound stops, security monitoring is promptly

started. As described above, the insensitive time can be set in units of 10 seconds from 10 seconds to 80 seconds. However, in the case where the user cannot go out within the insensitive time, if a convenient sender 6 is operated, a setting time is updated from this time. Thus, the insensitive time can be further extended.

Next, when a door is opened at coming home, a security sensor 4 operates and an encoded code informing an occurrence of intrusion and a house code are sent to the centralized control board 1 with radio wave. Then, the centralized control board 1 receives the radio wave with an installed antenna 1m, detects the radio wave in a receiving unit 101 and sends a detection output to the microcomputer 102. When receiving a detected signal from the receiving unit 101, the microcomputer 102 reads the house code set by a house code set switch 113 and determines whether or not the set house code corresponds to the received house code. As a result, when both codes correspond to each other, the microcomputer 102 determines the type of security on the basis of data previously stored in a memory 114, stores the security type in the temporary memory 114 and promptly starts a timer for the insensitive time by the time set by the insensitive time set switch 116. At the same time, the microcomputer 102 oscillates the oscillation circuit 103 extremely briefly to sound the built-in buzzer 1a during the insensitive time, thereby informing the insensitive time. Here, the resident presses a release switch 1f during the insensitive time, thereby releasing the information stored in the memory 114 and switching the device from the out-of-home mode to a NO mode (non-monitoring mode). At this time, if the release switch 1f is kept intact without being operated, at the same time as remaining of the insensitive time

becomes "0", the microcomputer 102 operates the drive circuit 104 on the basis of the information stored in the memory 114 to turn on the security display unit 1b, as well as operates the oscillation circuit 103, thereby continuously sounding the built-in buzzer 1a of the centralized control board 1. Furthermore, the microcomputer 102 operates an oscillation drive circuit 112 to allow a speaker 2 installed outdoors to continuously issue sirens. To stop these sounds, the display unit 1b is turned off by pressing the release switch 1f to stop the built-in buzzer 1a and the outdoor speaker 2. At the same time, the out-of-home mode is switched to the NO mode.

As described above, in this embodiment, since the insensitive time in setting the out-of-home mode and the insensitive time in coming home can be set separately and freely, the insensitive time according to the place of the centralized control board 1. Moreover, since an attention is drawn by sounds during the insensitive time, usability is improved.

Although the insensitive time in setting the out-of-home mode and the insensitive time in coming home are set by the respective distinct switches in the above-mentioned embodiment, a similar effect can be obtained by setting the same insensitive time by the same switch.

Furthermore, a similar effect can be obtained by using melody or mechanized voice as the alarm sound during the insensitive time.

第 1 図

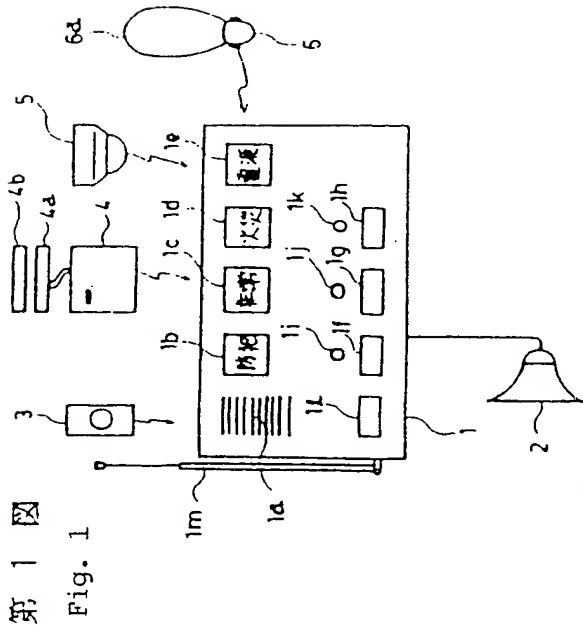


Fig. 1

第 2 図

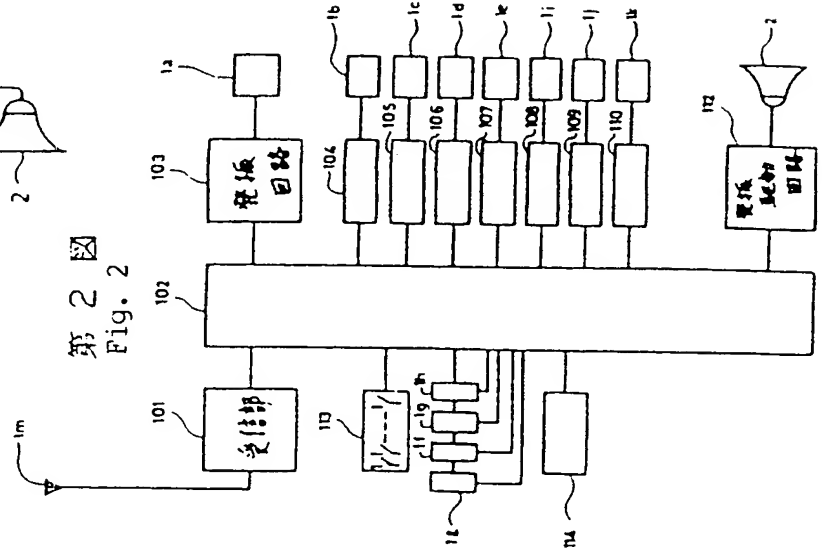


Fig. 2

Fig. 3

第 3 図

